What is claimed is:

1. A disk array apparatus comprising:

a host adapter for transferring data between a host system and the disk array apparatus;

a cache memory for storing data written from the host adapter;

a storage device adapter for executing control to write data to the cache memory or to read data from the cache memory;

a control memory to which control information is to be written by the host adapter and the storage device adapter;

a plurality of kinds of storage devices to which data are to be written on the basis of control of the storage device adapter;

a data movement control part provided in the storage device adapter,

the host adapter creating a plurality of logical devices on the basis of storage areas of the plurality of kinds of storage devices and executing control to cause the plurality of logical devices to be objects to be accessed from the host system,

the data movement control part executing control to move, when the host adapter receives an access control command to specify an access operation to a first logical device included in the plurality of logical devices, data associated with the

first logical device among a plurality of storage devices different in reliability from one another and included in the plurality of kinds of storage devices, according to a content of the specified access operation.

2. A disk array apparatus according to claim 1, wherein the access control command has a data manipulation preventing function.

3. A disk array apparatus according to claim 2, wherein the plurality of kinds of storage devices include a first storage device having a first attribute and a second storage device having a second attribute.

4. A disk array apparatus according to claim 3, wherein the data movement control part moves data stored in the first storage device to the second storage device when the access operation relative to the data is limited by the access control command.

5. A disk array apparatus according to claim 4, wherein the data movement control part moves the data stored in the second storage device to the first storage device when limitation of the access operation relative to the data is released by the access control command.

6. A disk array apparatus according to claim 5, wherein when the access operation relative to the data stored in the first storage device is limited by the access control command, the data movement control part moves the data to the second storage device after a preset predetermined time has elapsed.

7. A disk array apparatus according to claim 5, wherein the access control command includes a first access control command which applies relatively larger limitation to the access operation and a second access control command which applies relatively smaller limitation to the access operation,

the data movement control part:

(1) moving the data stored in the first storage device to the second storage device when the access operation relative to the data is limited by the first access control command, and

(2) moving the data stored in the first storage device to the second storage device after a preset predetermined time has elapsed, when the access operation relative to the data is limited by the second access control command.

8. A disk array apparatus according to claim 5, wherein the access control command includes a first access control

command which applies relatively larger limitation to the access operation and a second access control command which applies relatively smaller limitation to the access operation,

the second storage device including an upper-side second storage device and a lower-side second storage device,

the data movement control part:

(1) moving the data stored in the first storage device to the lower-side second storage device when the access operation relative to the data is limited by the first access control command, and

(2) when the access operation relative to the data stored in the first storage device is limited by the second access control command, moving the data to the upper-side second storage device, and after a preset predetermined time has elapsed, moving the data back to the lower-side second storage device.

9. A disk array apparatus according to claim 5, wherein a management table which temporarily manages a limitation content of the access operation when the host adapter receives the access control command is constructed in the control memory,

the data movement control part controlling movement of the data by referring to the management table.

10. A disk array apparatus according to claim 5, wherein the access control command controls the access operation in units of logical devices created on the basis of storage areas of the plurality of kinds of storage devices,

the data movement control part moving data in units of the logical devices.

11. A disk array apparatus according to claim 5, wherein the access control command includes at least one of a write inhibit command and a write and read inhibit command.

12. A disk array apparatus according to claim 7 or 8, wherein the first access control command is a write and read inhibit command, while the second control command is a write inhibit command.

13. A disk array apparatus according to claim 5, wherein the first storage device is a storage device having relatively higher performance, while the second storage device is a storage device having relatively lower performance.

14. A disk array apparatus according to claim 5, wherein the first storage device is an internal storage device existing inside the disk array apparatus, while the second storage

device is an external storage device existing outside the disk array apparatus.

15. A disk array apparatus according to claim 8, wherein the first storage device is a storage device having relatively higher performance, the upper-side second storage device is a storage device having relatively medium performance, and the lower-side second storage device is a storage device having relatively lower performance.

16. A control method for a disk array apparatus including a host adapter for transferring data between a host system and the disk array apparatus, a cache memory for storing data written from the host adapter, a storage device adapter for executing control to write data to the cache memory or to read data from the cache memory, a control memory to which control information is to be written by the host adapter and the storage device adapter, a first storage device and a second storage device to which data are to be written on the basis of control of the storage device adapter and which have different attributes, respectively,

the host adapter creating a plurality of logical devices on the basis of storage areas of the first and second storage devices and executing control to cause the plurality of logical devices to be objects to be accessed from the host

system,

the control method comprising:

a reception decision step of determining whether receiving from the host system an access control command indicative of an access operation to a first logical device included in the plurality of logical devices;

a moving step of, when the access operation to data associated with the first logical device is limited by the access control command, moving the data from the first storage device to the second storage device; and

a restoring step of restoring the data moved to the second storage device to the first storage device when limitation of the access operation is released by the access control command.

17. A control method for the disk array apparatus according to claim 16, wherein the moving step moves the data stored in the first storage device from the first storage device to the second storage device after a preset predetermined time has elapsed, when the access operation relative to the data is limited by the access control command.

18. A control method for the disk array apparatus according to claim 16, wherein the access control command includes a first access control command which applies relatively larger

limitation to the access operation and a second access control command which applies relatively smaller limitation to the access operation,

the moving step:

(1) moving the data stored in the first storage device from the first storage device to the second storage device when the access operation relative to the data is limited by the first access control command, and

(2) moving the data stored in the first storage device from the first storage device to the second storage device after a preset predetermined time has elapsed, when the access operation relative to the data is limited by the second access control command.

19. A disk array apparatus according to claim 16, wherein the access control command includes a first access control command which applies relatively larger limitation to the access operation and a second access control command which applies relatively smaller limitation to the access operation,

the second storage device including an upper-side second storage device and a lower-side second storage device,

the moving step:

(1) moving the data stored in the first storage device from the first storage device to the lower-side second storage

device when the access operation relative to the data is limited by the first access control command, and

(2) when the access operation relative to the data stored in the first storage device is limited by the second access control command, moving the data from the first storage device to the upper-side second storage device, and after a preset predetermined time has elapsed, moving the data from the upper-side second storage device back to the lower-side second storage device.

20. A control method for the disk array apparatus according to claim 16, wherein the access control command controls the access operation in units of logical devices created on the basis of storage areas of the storage devices,

each of the moving step and the restoring step moving data in units of the logical devices.